Northern Utilities, Inc. NHPUC Docket No. DE 14-216 2017 Annual Report – Lost Base Revenue

In accordance with the requirements of the Settlement Agreement approved by the New Hampshire Public Utilities Commission in Order No. 25,976, dated December 23, 2016 in DE 14-216, Northern Utilities, Inc. ("NUI") herein provides it's calculation of lost base revenue ("LBR") for 2017. A description of how the Average Distribution Rate ("ADR") for lost revenue was calculated, including information on the inclusion or exclusion of relevant inputs such as customer charges and meter charges. As required, the billing determinants in such calculation are based on 2017 data and rates in effect throughout 2017. The reconciliation of LBR with revenue collected through the Lost Revenue Rate is also provided as part of this report. The contents of the report are provided below.

Page 1 provides the total LBR for January through December 2017. The calculation is based on the therm savings provided on page 3 and the ADRs provided on page 4.

Page 2 provides a reconciliation of the 2017 LBR from page 1 with revenues collected through the Lost Revenue Rate.

Page 3 provides program year 2017 savings for the LBR calculations.

Page 4 provides the calculation of the ADR for the January 1 to April 30, 2017 period, May-July 2017 period, August-October 2017 period, and the November-December 2017 period. The periods reflect seasonal rate changes. Also on August 1, 2017, NUI implemented temporary rates as approved in Order No. 26,043, dated July 31, 2017 in DE 17-070.

Page 5 provides supporting detail for the ADR calculated on page 4.

Pages 6 through 20 provide supporting documentation of the customer charges and distribution rates in effect January 1 to July 31, 2017, which are used in the calculations on page 5. Page 21 provides support for rate changes effective August 1 to December 31, 2017.

Page 22 provides supporting documentation for billing determinants used in the ADR calculations. This data was extracted from the company's billing system. Note that customer counts for each rate class were derived on page 5, by dividing customer charge revenue by the customer charge in effect. This method was used since customer counts change throughout the month. Dividing customer charge revenue by the customer charge in effect results in a customer count that reflects the billing determinant for the month. As indicated above, the ADR does not include customer charges so this method has no impact on LBR.

With respect to the calculation of ADR, as shown on page 4, NUI calculated an ADR for each sector by dividing the total therm distribution revenue by the therms for the applicable time period. Details by class are shown on page 5. As shown, the therm distribution revenue is calculated by multiplying the distribution rates that were billed for the period by the billing determinants for the same period. As indicated above, NUI calculated ADR for four periods (January-April 30, 2017, May-July 2017, August-October 2017, and November-December 2017), since it had distribution rate changes throughout 2017. The January through April period uses rates in effect for the Winter Season. The May through July period uses Summer Season rates. The August through October period also uses Summer Season rates including the temporary rate change. The November through December period uses Winter Season rates including the temporary rate change.

Northern Utilities Actual Monthly and Cumulative Savings (Therms) and Lost Revenue Rate January 1, 2017 to December 31, 2017

			Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	2017
Line	Description	12/31/2016	Jan 2017	Feb 201	7 Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Annual Savings
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	Residential Annual	lized Savings	-	9,979	5,430	2,669	11,231	4,854	7,175	13,699	4,911	6,284	4,525	-	70,756
2	C&I Annualized Sa	vings			8,786	241	2,021	2,237	3,507			68,057	31,953	148,773	265,574
3	Total		-	9,979	14,216	2,910	13,252	7,090	10,682	13,699	4,911	74,341	36,478	148,773	336,331
															Cumulative
			Jan 2017	Feb 201	7 Mar 2017	Apr 2017	May 2017	'June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	LBR Savings
4	Monthly Residenti	al Savings	-	832	453	222	936	404	598	1,142	409	524	377	-	
5	Cumulative Reside	ntial Savings	-	832	1,284	1,507	2,442	2,847	3,445	4,586	4,996	5,519	5,896	5,896	39,250
6	Average Residentia	al Distribution Rate	0.5560	0.5560	0.5560	0.5560	0.5421	0.5421	0.5421	0.5634	0.5634	0.5634	0.5903	0.5903	
7	Lost Residential Re	evenue	\$ -	\$ 462	\$ 714	\$ 838	\$ 1,324	\$ 1,543	\$ 1,867	\$ 2,584	\$ 2,815	\$ 3,110	\$ 3,481	\$ 3,481	\$ 22,218
8	Monthly CO I Covin				732	20	168	186	292			F 671	2.002	12 200	
_	Monthly C&I Savin	•	-	-					_	-	-	5,671	2,663	12,398	46.645
9	Cumulative C&I Sa	o .		<u>-</u>	732	752	921	1,107	1,399	1,399	1,399	7,071	9,733	22,131	46,645
10	Average C&I Distri	bution Rate	0.1749	0.1749	0.1749	0.1749	0.1117	0.1117	0.1117	0.1257	0.1257	0.1257	0.1953	0.1953	
11	Lost C&I Revenue		\$ -	\$ -	\$ 128	\$ 132	\$ 103	\$ 124	\$ 156	\$ 176	\$ 176	\$ 889	\$ 1,901	\$ 4,322	\$ 8,106
12	Total Lost Revenue	e	\$ -	\$ 462	\$ 842	\$ 969	\$ 1,427	\$ 1,667	\$ 2,024	\$ 2,760	\$ 2,990	\$ 3,998	\$ 5,382	\$ 7,803	30,324

Line 1: Actual Therm Savings - See Page 3.

Line 2: Actual Therm Savings - See Page 3.

Line 3: Line 1 + Line 2

Line 4: Line 1 / 12

Line 5: Prior Month Line 5 + Current Month Line 4

Line 6: Page 4

Line 7: Line 5 x Line 6

Line 8: Line 2 / 12

Line 9: Prior Month Line 9 + Current Month Line 8

Line 10: Page 4

Line 11: Line 9 x Line 10

Line 12: Line 7 + Line 11

Northern Utilities, Inc. **Lost Revenue Reconciliation** 2017

2017 Annual Report - Lost Revenue Rate

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				Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	
Line	Sector / Description	Unit	1	an-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
1	RESIDENTIAL															
2	Beginning Balance - (Over)/Under COSTS	\$'s	\$	- \$	(777) \$	(2,022) \$	(2,894) \$	(3,366) \$	(2,717) \$	(1,596) \$	36 \$	2,425	5,036 \$	7,915 \$	9,851	
4	Incremental Annualized Savings	Therms		-	9,979	5,430	2,669	11,231	4,854	7,175	13,699	4,911	6,284	4,525	-	70,757
5	Incremental Monthly Savings	Therms		-	832	453	222	936	405	598	1,142	409	524	377	-	5,896
6																
7	Cumulative Savings - Current	Therms		-	832	1,284	1,507	2,442	2,847	3,445	4,586	4,996	5,519	5,896	5,896	39,251
8	Cumulative Savings - Prior	Therms			<u> </u>									<u> </u>	-	
9	Cumulative LBR Savings	Therms		-	832	1,284	1,507	2,442	2,847	3,445	4,586	4,996	5,519	5,896	5,896	39,251
10																
11	Average Distribution Rate	\$/Therm	\$	0.5560 \$	0.5560 \$	0.5560 \$	0.5560 \$	0.5421 \$	0.5421 \$	0.5421 \$	0.5634 \$	0.5634	0.5634 \$	0.5903 \$	0.5903	
12 13	Lost Distribution Revenue	\$'s	\$	- \$	462 \$	714 \$	838 \$	1,324 \$	1,543 \$	1,867 \$	2,584 \$	2,815	3,110 \$	3,481 \$	3,481	22,218
14	REVENUE	_														
15 16	Revenue Through Lost Revenue Rate	\$'s	\$	775 \$	1,702 \$	1,585 \$	1,307 \$	654 \$	408 \$	235 \$	203 \$	221 \$	259 \$	1,578 \$	7,391	16,318
17 18	(Over)/Under-Recovery (Exc interest)		\$	(775) \$	(2,017) \$	(2,893) \$	(3,364) \$	(2,696) \$	(1,581) \$	36 \$	2,417 \$	5,019	7,886 \$	9,817 \$	5,941	
19	INTEREST															
20	Average Monthly Balance	_	\$	(388) \$	(1,397) \$	(2,458) \$	(3,129) \$	(3,031) \$	(2,149) \$	(780) \$	1,227 \$	3,722	6,461 \$	8,866 \$	7,896	
21	Interest Rate-WSJ Prime Rate	Annual %		3.50%	3.50%	3.50%	3.75%	3.75%	3.75%	4.00%	4.00%	4.00%	4.25%	4.25%	4.25%	Total
22	Days per Month			31	28	31	30	31	30	31	31	30	31	30	31	365
23 24	Computed Interest	\$'s	\$	(2) \$	(5) \$	(1) \$	(2) \$	(21) \$	(15) \$	0 \$	8 \$	17 \$	28 \$	34 \$	21	\$ 63
25	Ending Balance	\$'s	\$	(777) \$	(2,022) \$	(2,894) \$	(3,366) \$	(2,717) \$	(1,596) \$	36 \$	2,425 \$	5,036	7,915 \$	9,851 \$	5,962	
26	COMMERCIAL & INDUSTRIAL															
27 28	Beginning Balance - (Over)/Under	\$'s	\$	- \$	(861) \$	(2,175) \$	(3,382) \$	(4,286) \$	(4,886) \$	(5,253) \$	(5,576) \$	(5,866)	(6,157) \$	(5,823) \$	(7,118)	
29	COSTS															
30	Incremental Annualized Savings	Therms		-	-	8,786	241	2,021	2,237	3,507	-	-	68,057	31,953	148,773	265,575
31	Incremental Monthly Savings	Therms		-	-	732	20	168	186	292	-	-	5,671	2,663	12,398	22,131
32																
33	Cumulative Savings - Current	Therms		-	-	732	752	921	1,107	1,399	1,399	1,399	7,071	9,734	22,131	46,646
34	Cumulative Savings - Prior	Therms													-	
35 36	Cumulative LBR Savings	Therms		-	÷	732	752	921	1,107	1,399	1,399	1,399	7,071	9,734	22,131	46,646
37	Average Distribution Rate	\$/Therm	\$	0.1749 \$	0.1749 \$	0.1749 \$	0.1749 \$	0.1117 \$	0.1117 \$	0.1117 \$	0.1257 \$	0.1257	0.1257 \$	0.1953 \$	0.1953	2
38 39	Lost Distribution Revenue	\$'s	\$	- \$	- \$	128 \$	132 \$	103 \$	124 \$	156 \$	176 \$	176	889 \$	1,901 \$	4,322	8,106
40	REVENUE															
41	Revenue Through Lost Revenue Rate	\$'s	\$	859 \$	1,308 \$	1,324 \$	1,022 \$	688 \$	474 \$	461 \$	446 \$	446	5 534 \$	3,171 \$	6,398	17,131
42 43	(Over)/Under-Recovery (Exc interest)	\$'s	\$	(859) \$	(2,170) \$	(3,372) \$	(4,273) \$	(4,871) \$	(5,237) \$	(5,558) \$	(5,847) \$	(6,137)	(5,802) \$	(7,093) \$	(9,193)	
44 45	INTEREST															
46	Average Monthly Balance	_	\$	(429) \$	(1,516) \$	(2,774) \$	(3,827) \$	(4,578) \$	(5,062) \$	(5,405) \$	(5,712) \$	(6,001)	(5,979) \$	(6,458) \$	(8,155)	
47	Interest Rate-WSJ Prime Rate	Annual %		3.50%	3.50%	3.50%	3.75%	3.75%	3.75%	4.00%	4.00%	4.00%	4.25%	4.25%	4.25%	Total
48	Days per Month			31	28	31	30	31	30	31	31	30	31	30	31	365
49 50	Computed Interest	\$'s	\$	(3) \$	(6) \$	(10) \$	(13) \$	(16) \$	(16) \$	(19) \$	(20) \$	(20)	(21) \$	(25) \$	(33)	\$ (143)
51	Ending Balance	\$'s	\$	(861) \$	(2,175) \$	(3,382) \$	(4,286) \$	(4,886) \$	(5,253) \$	(5,576) \$	(5,866) \$	(6,157)	(5,823) \$	(7,118) \$	(9,226)	

Line 2/27: Prior period ending balance

Line 20: (Line 2+Line 19)/2 Line 7: Page 1, Line 4 Line 11: Page 4, Line 7/23 Lines 21/51: Prime Rate

Line 23: Line 20X(Line 21/# days per year)X Line 22

Line 25: Line 17+Line 23

Line 15/41: Accounting actual data Line 17/43: Line 2 + Line 12-Line 15/ Line 27+ Line38- Line 43

Line 43: Line 27+Line 38-Line 41

Line 46: (Line 27+Line 45)/2

Line 49: Line 43 X (Line 47/# days per year)X Line 48

Line 53: Line 43 + Line 49

NORTHERN UTILITIES, INC. - NH

Gas Savings for LRR Calculation PROGRAM YEAR 2017

		PLAN	ACTU/	AL SAVINGS	
		Annual	Annual	Capped Co.	Variance
1.	Residential Programs	Therms	Therms	Th @ 110%	from Plan
2.	Home Energy Assistance	12,066.0	12,310.4		
3.	EnergyStar Homes	12,765.0	12,506.8		
4.	Home Performance w/EnergyStar	12,288.0	9,459.1		
5.	EnergyStar Products	29,877.0	36,480.0		
6.	Residential	66,996.0	70,756.3	70,756.3	_
7.					
8.	Commercial & Industrial Programs				
9.	Large Business Energy Solutions	194,723.0	233,099.5	220,260.8	
10.	Small Business Energy Solutions	44,036.0	45,313.4	45,313.4	
11.	-	-	-	-	
12.	Commercial & Industrial	238,759.0	278,412.9	265,574.2	_
13.					
14.	Total 2017 Portfolio	305,755.0	349,169.2	336,330.5	10.0%

Note	1)	ı

			Actual	Actual	Actual										
	Monthly LBR Savings - 2017 Installat	ions	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
15.	Residential Programs														
16.	Annualized Therms by Month	L. 18 * 12 Mo.	0	9,979	15,409	18,078	29,309	34,163	41,338	55,036	59,947	66,232	70,756	70,756	
17.															
18.	Monthly Incremental	L. 16 ÷ 12	0	832	1,284	1,507	2,442	2,847	3,445	4,586	4,996	5,519	5,896	5,896	39,250
19.	Monthly Cumulative	Sum of L. 18	0	832	2,116	3,622	6,065	8,912	12,356	16,943	21,938	27,458	33,354	39,250	
20.															
21.	Commercial & Industrial Programs														
22.	Annualized Therms by Month	L. 24 * 12 Mo.	0	0	8,786	9,027	11,048	13,285	16,791	16,791	16,791	84,848	116,801	265,574	
23.														(Note 2)	
24.	Monthly Incremental	L. 22 ÷ 12	0	0	732	752	921	1,107	1,399	1,399	1,399	7,071	9,733	22,131	46,645
25.	Monthly Cumulative	Sum of L. 24	0	0	732	1,484	2,405	3,512	4,911	6,311	7,710	14,781	24,514	46,645	
26.															
27.	Total Annualized Therms by Month	L. 16 + L. 22	0	9,979	24,195	27,105	40,357	47,447	58,129	71,828	76,738	151,080	187,558	336,331	
28.	Percent of Plan Savings	L. 27 ÷ L. 14 Plan	0%	3%	8%	9%	13%	16%	19%	23%	25%	49%	61%	110.0%	

NOTES:

^{1.} Equals [(Actual Capped at 110% ÷ Plan) - 1]. See Settlement, Page 5 in DE 15-137. "In each calendar year, for each utility, the savings for which lost revenue may be recovered will be capped at 110% of planned annual savings."

^{2.} Reduced savings associated with the Large Business Enery Solutions Program to ensure annual company savings due to 2017 installations does not exceed 110% of Plan. See Note 1.

Northern Utilities, Inc. Calculation of Average Distribution Rate for Lost Revenue For 2017

1 Based on Actual Billin 2	(1)	(2)	n-April 2017 Distribution Rates (3)=(1)/(2)
_	Total Volumetric	(2)	(3)-(1)/(2)
3	Revenue*	Total Annual therms	Average Distribution Rate \$/therm
4 R-5	\$5,698,354	10,230,532	\$0.5570
5 R-10	\$189,895	335,586	\$0.5659
6 R-6	\$43,178	102,463	\$0.4214
7 Total Residential Service	\$5,931,426	10,668,581	\$0.5560
8 G-40	\$1,058,520	6,554,303	\$0.1615
9 G-50	\$103,742	642,365	\$0.1615
.0 G-41	\$1,596,275	7,608,556	\$0.2098
.1 G-51	\$255,750	1,808,646	\$0.1414
2 G-42	\$560,106	3,175,203	\$0.1764
.3 G-52	\$842,538	5,467,476	\$0.1541
			_
.4 Total General Service	\$4,416,931	25,256,549	\$0.1749
5 Total Company	\$ 10.348.358	35.925.130	

1 otal Company \$ 10,348,358 35,925,130

17 Based on Actual Billing Determinants for <u>Aug-Oct 2017</u> at Aug-Oct 2017 Distribution Rates

18		(1)	(2)	(3)=(1)/(2)
		Total Volumetric		
19		Revenue*	Total Annual therms	Average Distribution Rate \$/therm
20	R-5	\$629,462	1,108,598	\$0.5678
21	R-10	\$15,559	27,402	\$0.5678
22	R-6	\$18,859	42,447	\$0.4443
23	Total Residential Service	\$663,880	1,178,447	\$0.5634
24	G-40	\$85,703	464,768	\$0.1844
25	G-50	\$75,252	408,093	\$0.1844
26	G-41	\$170,963	923,623	\$0.1851
27	G-51	\$125,590	942,380	\$0.1333
28	G-42	\$109,158	842,916	\$0.1295
29	G-52	\$339,221	3,624,153	\$0.0936
30	Total General Service	\$905,886	7,205,933	\$0.1257
31	Total Company	\$ 1,569,766	8,384,379	

Based on Actual Billing Determinants for May-July 2017 at May-July 2017 Distribution Rates

	(1)	(2)	(3)=(1)/(2)
	Total Volumetric		
	Revenue*	Total Annual therms	Average Distribution Rate \$/therm
R-5	\$1,135,105	2,083,144	\$0.5449
R-10	\$36,863	67,650	\$0.5449
R-6	\$20,779	49,309	\$0.4214
Total Residential			
Service	\$1,192,746	2,200,103	\$0.5421
G-40	\$157,887	977,628	\$0.1615
G-50	\$66,689	412,934	\$0.1615
G-41	\$249,899	1,540,686	\$0.1622
G-51	\$110,899	1,003,474	\$0.1105
G-42	\$80,817	758,132	\$0.1066
G-52	\$245,428	3,471,398	\$0.0707
Total General			
Service	\$911,618	8,164,252	\$0.1117

Total Company \$ 2,104,365 10,364,355

Based on Actual Billing Determinants for Nov-Dec 2017 at Nov-Dec 2017 Distribution Rates

	(1)	(2)	(3)=(1)/(2)
	Total Volumetric		
	Revenue*	Total Annual therms	Average Distribution Rate \$/therm
R-5	\$2,055,096	3,470,857	\$0.5921
R-10	\$54,847	91,208	\$0.6013
R-6	\$22,135	49,820	\$0.4443
Total Residential			
Service	\$2,132,079	3,611,885	\$0.5903
G-40	\$384,852	2,087,052	\$0.1844
G-50	\$53,212	288,566	\$0.1844
G-41	\$608,984	2,617,036	\$0.2327
G-51	\$131,265	797,969	\$0.1645
G-42	\$321,299	1,612,137	\$0.1993
G-52	\$516,539	2,918,300	\$0.1770
Total General			
Service	\$2,016,152	10,321,060	\$0.1953

Total Company \$ 4,148,231 13,932,945

Total Company CY 2017 (therms) 68,606,809

Total Company CY 2017 Volumetric Revenue \$ 18,170,719

36 Note: See Page 5 for details.

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32 33

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^{35 *} Revenues include therm charges only. Customer and meter charges are excluded.

Northern Utilities, Inc. Calculation of Distribution Revenue at the Rate Levels in Effect During 2017 Based on Billing Determinants for the Corresponding Period During 2017

January-July 2017 Calculated Customer Revenue

		<u>(1)</u>	(2)	(3)=(1)X(2)	<u>(4)</u>		<u>(5)</u>		(6) = (4) X (5)		<u>(7)</u>		(8)	(9) = (7) X (8)
									Calculated					Calculated
		Number of	Customer	Calculated	Billing Determinants - Winte	r (Jan-Apr 2017)	Winter Distribution Rat	es (JanApril 2017)	Winter	Billing Determinants	- Summer (May-Jul 2017Sum	mer Distributi	on Rates (May-Jul 2017	Summer
		Customers (1)	Charge	Customer	First	Excess	First	Excess	Distribution	First	Excess	First	Excess	Distribution
					<u>Therms</u>	Therms	Therms \$/thm	Therms \$/thm	Revenue	<u>Therms</u>	Therms The	rms \$/thm	Therms \$/thm	Revenue
R-5	Residential, Heating	162,583	\$21.36	\$3,472,769	4,205,222	6,025,310 \$	0.6239 \$	0.5103	\$5,698,354	1,735,982	347,162 \$	0.5449 \$	0.5449	\$1,135,105
R-10	Residential Heating, Low Income	5,880	\$8.54	\$50,218	164,132	171,454 \$	0.6239 \$	0.5103	\$189,895	56,482	11,168 \$	0.5449 \$	0.5449	\$36,863
R-6	Residential, Non-Heating	9,419	\$21.36	\$201,187	35,945	66,518 \$	0.4214 \$	0.4214	\$43,178	27,759	21,550 \$	0.4214 \$	0.4214	\$20,779
Total Resid	ential Service	177,882		\$3,724,174	4,405,299	6,263,282			\$5,931,426	1,820,223	379,880			\$1,192,746
G-40/T50	Low Annual, High Winter Use	35,436	\$67.45	\$2,390,160	1,364,194	5,190,109 \$	0.1615 \$	0.1615	\$1,058,520	472,342	505,286 \$	0.1615 \$	0.1615	\$157,887
G-50/T50	Low Annual, Low Winter Use	5,611	\$67.45	\$378,469	151,434	490,931 \$	0.1615 \$	0.1615	\$103,742	109,603	303,331 \$	0.1615 \$	0.1615	\$66,689
G-41/T41	Medium Annual, High Winter Us	4,490	\$196.73	\$883,377	7,608,556	\$	0.2098		\$1,596,275	1,540,686	\$	0.1622		\$249,899
G-51/T51	Medium Annual, Low Winter Us	1,830	\$196.73	\$359,924	1,129,079	679,567 \$	0.1520 \$	0.1238	\$255,750	656,256	347,218 \$	0.1183 \$	0.0958	\$110,899
G-42/T42	High Annual, High Winter Use	235	\$1,124.19	\$263,885	3,175,203	\$	0.1764		\$560,106	758,132	\$	0.1066		\$80,817
G-52/T52	High Annual, Low Winter Use	233	\$1,124.19	\$262,049	5,467,476	\$	0.1541		\$842,538	3,471,398	\$	0.0707		\$245,428
Total Gene	ral Service	47,835	•	\$4,537,864	18,895,942	6,360,607			\$4,416,931	7,008,417	1,155,835			\$911,618
Total Comp	pany	225,717		\$8,262,038	23,301,241	12,623,889			\$10,348,358	8,828,640	1,535,715			\$2,104,365

			_											
	August-December 2017 Ca									1				
		<u>(1)</u>	<u>(2)</u>	(3)=(1)X(2)	<u>(4)</u>		(5)		(6) = (4) X (5) Calculated	(7).		(8)		(9) = (7) X (8)
														Calculated
		Number of	Customer		Billing Determinants - Summ		Summer Distribution Ra	, ,		-	ts - Winter (Nov-Dec 2017) Wi		n Rates (Nov-Dec 2017)	
		Customers (1)	<u>Charge</u>	Customer	First	Excess	First	Excess	Distribution	First	Excess	First	Excess	Distribution
					<u>Therms</u>	Therms	Therms \$/thm	Therms \$/thm	Revenue	<u>Therms</u>	Therms The	erms \$/thm	Therms \$/thm	Revenue
R-5	Residential, Heating	114,042	\$21.36	\$2,435,928	1,051,751	56,847 \$	0.5678 \$	0.5678	\$629,462	1,799,608	1,671,249 \$	0.6468 \$	0.5332	\$2,055,096
R-10	Residential Heating, Low Income	3,402	\$8.54	\$29,055	26,902	499 \$	0.5678 \$	0.5678	\$15,559	54,712	36,496 \$	0.6468 \$	0.5332	\$54,847
R-6	Residential, Non-Heating	6,966	\$21.36	\$148,800	27,329	15,118 \$	0.4443 \$	0.4443	\$18,859	18,562	31,258 \$	0.4443 \$	0.4443	\$22,135
Total Re	sidential Service	124,410		\$2,613,783	1,105,982	72,465			\$663,880	1,872,882	1,739,003			\$2,132,079
G-40	Low Annual, High Winter Use	24,660	\$67.45	\$1,663,304	268,251	196,517 \$	0.1844 \$	0.1844	\$85,703	547,368	1,539,684 \$	0.1844 \$	0.1844	\$384,852
G-50	Low Annual, Low Winter Use	4,061	\$67.45	\$273,881	110,632	297,461 \$	0.1844 \$	0.1844	\$75,252	71,612	216,954 \$	0.1844 \$	0.1844	\$53,212
G-41	Medium Annual, High Winter Us	3,167	\$196.73	\$623,012	923,623	\$	0.1851		\$170,963	2,617,036	\$	0.2327		\$608,984
G-51	Medium Annual, Low Winter Us	1,289	\$196.73	\$253,513	610,189	332,191 \$	0.1412 \$	0.1187	\$125,590	503,665	294,304 \$	0.1749 \$	0.1467	\$131,265
G-42	High Annual, High Winter Use	160	\$1,124.19	\$180,058	842,916	\$	0.1295		\$109,158	1,612,137	\$	0.1993		\$321,299
G-52	High Annual, Low Winter Use	165	\$1,124.19	\$185,004	3,624,153	\$	0.0936		\$339,221	2,918,300	\$	0.1770		\$516,539
Total Ge	eneral Service	33,501		\$3,178,772	6,379,764	826,169			\$905,886	8,270,118	2,050,942			\$2,016,152
		•				·								
Total Co	mpany	157,911		\$5,792,555	7,485,746	898,634			\$1,569,766	10,143,000	3,789,945			\$4,148,231

\$32,225,300

68,606,809

(1) Number of customers calculated based on actual revenue divided by customer charge.

Notes:

Rates - See Pages 6 through 21 Billing Determinants - See Page 22.

		Summary 2017		
	<u>(10)=(3)</u>	(11) = (6) + (9)	<u>12=(10+(11)</u>	(13)=(4)+(7)
	Total Calculated	Total	Total	Total
		Volumetric	Distribution	Annual
		Revenue	Revenue	<u>Therms</u>
R-5	\$5,908,697	\$9,518,017	\$15,426,714	16,893,131
R-10	\$79,273	\$297,164	\$376,437	521,846
R-6	\$349,988	\$104,951	\$454,938	244,038
otal Residential Service	\$6,337,957	\$9,920,131	\$16,258,089	17,659,015
G-40/T40	\$4,053,464	\$1,686,962	\$5,740,427	10,083,751
G-50/T50	\$652,350	\$298,878	\$951,228	1,751,958
6-41/T41	\$1,506,389	\$2,626,121	\$4,132,510	12,689,901
G-51/T51	\$613,437	\$623,509	\$1,236,946	4,552,469
G-42/T42	\$443,943	\$1,071,379	\$1,515,322	6,388,388
G-52/T52	\$447,053	\$1,943,726	\$2,390,779	15,481,327
		·		
otal General Service	\$7,716,636	\$8,250,587	\$15,967,211	50,947,794
			· · · · · · · · · · · · · · · · · · ·	1

\$18,170,719

\$14,054,593

Total Company

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VI. RATE SCHEDULES

RATE SCHEDULE R-5 - RESIDENTIAL HEATING SERVICE

CHARACTER OF SERVICE

Natural Gas or its equivalent having a nominal heat content of 1,000 Btu per cubic foot.

<u>APPLICABILITY</u>

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

Service hereunder is available under this rate at single, domestic locations for all purposes in individual private dwellings and individual apartments including condominiums and their facilities which use gas as the principal household heating fuel or at locations which are otherwise deemed ineligible for non-heating service based on availability.

RATE - MONTHLY

Customer (Charge			\$21.36 per month
Summer	<u>-</u>	First 50 therms	@	\$0.5449 per therm
	-	Excess 50 therms	@	\$0.5449 per therm
Winter	<u>-</u>	First 50 therms	@	\$0.6239 per therm
	-	Excess 50 therms	@	\$0.5103 per therm

MINIMUM BILL

The minimum monthly bill for gas service will be the Customer Charge Per Month.

COST OF GAS FACTOR AND LOCAL DELIVERY ADJUSTMENT CLAUSE

The provisions of the Company's Cost of Gas Clause, Part IV, and the Local Delivery Adjustment Clause, Part V, apply to gas sold under this rate schedule.

Issued: April 28, 2015 Effective: May 1, 2015

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VI. RATE SCHEDULES

RATE SCHEDULE R-10 - LOW INCOME RESIDENTIAL HEATING SERVICE

RATE - MONTHLY

Customer Charge				\$8.54 per month
Summer	<u>.</u>	First 50 therms Excess 50 therms	@ @	\$0.2179 per therm \$0.2179 per therm
Winter	-	First 50 therms Excess 50 therms	@ @	\$0.2496 per therm \$0.2041 per therm

MINIMUM BILL

The minimum monthly bill for gas service will be the Customer Charge Per Month.

COST OF GAS FACTOR AND LOCAL DELIVERY ADJUSTMENT CLAUSE

The provisions of the Company's Cost of Gas Clause, Part IV, and the Local Delivery Adjustment Clause, Part V, apply to gas sold under this rate schedule.

DEFINITIONS

Summer - Defined as being the Company's billing cycles May through October.

Winter - Defined as being the Company's billing cycles November through April.

TERMS OF PAYMENT

Bills are due and payable upon presentation. A late payment charge at a rate to be determined by the NHPUC from time to time will be assessed from the date of the bill on balances unpaid within twenty five days after the billing date. When bills are paid by remittance through the mail, the postmark on the envelope will be considered as the date of payment.

Issued: April 28, 2015

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Effective: May 1, 2015

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VI. RATE SCHEDULES

RATE SCHEDULE R-6 - RESIDENTIAL NON-HEATING SERVICE

CHARACTER OF SERVICE

Natural Gas or its equivalent having a nominal heat content of 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

Service hereunder is available for any residential purpose other than for use as the principal heating fuel except that this rate is not available at locations where usage in the six winter months of November through April is greater than or equal to 80% of annual usage and usage exceeds 100 therms in any winter month.

RATE - MONTHLY

Customer Charge			\$21.36 per month
Summer	First 10 therms Excess 10 therms	@	\$0.4214 per therm \$0.4214 per therm
Winter	First 10 therms Excess 10 therms	@ @.	\$0.4214 per therm \$0.4214 per therm

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VI. RATE SCHEDULES

RATE SCHEDULE G-40 - COMMERCIAL AND INDUSTRIAL SALES SERVICE (Low Annual Use, High Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing one thousand (1,000) Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer Cha	\$67.45 per month			
Summer -:	-	First 75 therms Excess 75 therms	@ @	\$0.1615 per therm \$0.1615 per therm
Winter	-	First 75 therms Excess 75 therms	@ @	\$0.1615 per therm \$0.1615 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Clause, Part IV, and the Local Delivery Adjustment Clause, Part V.

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Effective: May 1, 2015

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VI. RATE SCHEDULES

RATE SCHEDULE G-41 - COMMERCIAL AND INDUSTRIAL SALES SERVICE (Medium Annual Use, High Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer (Charge	\$196.73 per month		
Summer	: -	All therms	@	\$0.1622 per therm
Winter	\$). •••	All therms	@	\$0.2098 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Clause, Part IV, and the Local Delivery Adjustment Clause, Part V.

CHARACTERISTICS OF CUSTOMER

A Customer receiving service under this schedule must have annual usage of greater than 8,000 therms but less than or equal to 80,000 therms and peak period usage greater than or equal to 67% of annual usage, as determined by the Company's records and procedures.

Issued: April 28, 2015 Effective: May 1, 2015

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VI. RATE SCHEDULES

RATE SCHEDULE G-42 - COMMERCIAL AND INDUSTRIAL SALES SERVICE (High Annual Use, High Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer C	Charge	\$1,124.19 per month		
Summer	-	All therms	@	\$0.1066 per therm
Winter	-	All therms	@	\$0.1764 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Clause, Part IV, and the Local Delivery Adjustment Clause, Part V.

CHARACTERISTICS OF CUSTOMER

A Customer receiving service under this schedule must have annual usage greater than 80,000 therms and peak period usage greater than or equal to 67% of annual usage, as determined by the Company's records and procedures.

Issued: April 28, 2015 Effective: May 1, 2015 Issued By:

Title:

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VI. RATE SCHEDULES

RATE SCHEDULE G-50 - COMMERCIAL AND INDUSTRIAL SALES SERVICE (Low Annual Use, Low Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer C	narge			\$67.45 per monun
Summer	-	First 75 therms Excess 75 therms	@ @	\$0.1615 per therm \$0.1615 per therm
Winter	1	First 75 therms Excess 75 therms	@ @	\$0.1615 per therm \$0.1615 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Factor, Part IV, and the Local Delivery Adjustment Clause, Part V.

Issued: April 28, 2015 Effective: May 1, 2015 Issued By:

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VI. RATE SCHEDULES

RATE SCHEDULE G-51 - COMMERCIAL AND INDUSTRIAL SALES SERVICE (Medium Annual Use, Low Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer	Charge			\$196.73 per month
Summer		First 1,000 therms Excess 1,000 therms	@ @	\$0.1183 per therm \$0.0958 per therm
Winter	 	First 1,300 therms Excess 1,300 therms	@ @	\$0.1520 per therm \$0.1238 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Clause, Part IV, and the Local Delivery Adjustment Clause, Part V.

Issued: April 28, 2015 Effective: May 1, 2015

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VI. RATE SCHEDULES

RATE SCHEDULE G-52 - COMMERCIAL AND INDUSTRIAL SALES SERVICE (High Annual Use, Low Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer Cl	narge	\$1,124.19 per month		
Summer	-	All therms	@	\$0.0707 per therm
Winter	-	All therms	<u>a</u>	\$0.1541 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Clause, Part IV, and the Local Delivery Adjustment Clause, Part V.

Issued: April 28, 2015

Effective: May 1, 2015

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Title:

Treasurer

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VI. RATE SCHEDULES

$\frac{\text{RATE SCHEDULE T-40 - COMMERCIAL AND INDUSTRIAL FIRM}}{\text{DELIVERY SERVICE}}$

(Low Annual Use, High Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer Charge			\$67.45 per month
Summer -	First 75 therms	@	\$0.1615 per therm
	Excess 75 therms	@	\$0.1615 per therm
Winter:	First 75 therms	@	\$0.1615 per therm
	Excess 75 therms	@	\$0.1615 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Company's Delivery Service Terms and Conditions, Part VII, and the Local Delivery Adjustment Clause, Part V.

Issued: April 28, 2015 Effective: May 1, 2015 Issued By:

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Title:

Treasurer

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VI. RATE SCHEDULES

RATE SCHEDULE T-41 - COMMERCIAL AND INDUSTRIAL FIRM DELIVERY SERVICE

(Medium Annual Use, High Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

<u>APPLICABILITY</u>

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer Charge	\$196.73 per month		
Summer -	All therms	@	\$0.1622 per therm
Winter -	All therms	@	\$0.2098 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Company's Delivery Service Terms and Conditions, Part VII, and the Local Delivery Adjustment Clause, Part V.

Issued: April 28, 2015 Effective: May 1, 2015

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VI. RATE SCHEDULES

$\frac{\text{RATE SCHEDULE T-42 - COMMERCIAL AND INDUSTRIAL FIRM}}{\text{DELIVERY SERVICE}}$

(High Annual Use, High Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer C	harge	\$1,124.19 per month		
Summer	-	All therms	@	\$0.1066 per therm
Winter	-	All therms	@	\$0.1764 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Company's Delivery Service Terms and Conditions, Part VII, and the Local Delivery Adjustment Clause, Part V.

Issued: April 28, 2015 Effective: May 1, 2015 Issued By:

Treasurer

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VI. RATE SCHEDULES

RATE SCHEDULE T-50 - COMMERCIAL AND INDUSTRIAL FIRM DELIVERY SERVICE

(Low Annual Use, Low Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer Ch	narge			\$67.45 per month
Summer	- .	First 75 therms Excess 75 therms	@ @	\$0.1615 per therm \$0.1615 per therm
Winter	- -	First 75 therms Excess 75 therms	@ @	\$0.1615 per therm \$0.1615 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Company's Delivery Service Terms and Conditions, Part VII and the Local Delivery Adjustment Clause, Part V.

Issued: April 28, 2015 Effective: May 1, 2015

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Treasurer

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VI. RATE SCHEDULES

RATE SCHEDULE T-51 - COMMERCIAL AND INDUSTRIAL FIRM DELIVERY SERVICE

(Medium Annual Use, Low Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer Ch	narge			\$196.73 per month
Summer	-	First 1,000 therms Excess 1,000 therms	@ @	\$0.1183 per therm \$0.0958 per therm
Winter	-	First 1,300 therms Excess 1,300 therms	@ @	\$0.1520 per therm \$0.1238 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Company's Delivery Terms and Conditions, Part VII, and the Local Delivery Adjustment Clause, Part V.

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issued by:

Treasurer

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VI. RATE SCHEDULES

RATE SCHEDULE T-52 - COMMERCIAL AND INDUSTRIAL FIRM DELIVERY SERVICE

(High Annual Use, Low Winter Use)

CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

APPLICABILITY

The towns of Dover, Durham, East Kingston, East Rochester, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, and Stratham and limited areas of Atkinson, Rollinsford and the contiguous territory served by the Company.

AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

RATE - MONTHLY

Customer Ch	arge			\$1,124.19 per month
Summer	-	All therms	@	\$0.0707 per therm
Winter	-	All therms	@	\$0.1541 per therm

RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Company's Delivery Service Terms and Conditions, Part VII, and the Local Delivery Adjustment Clause, Part V.

Issued: April 28, 2015

Effective: May 1, 2015

Issued By

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Northern Utilities, Inc. NHPUC Docket No. DE 14-216 2017 Annual Report-Lost Base Revenue Page 21 of 22

NHPUC No. 11 - Gas Northern Utilities, Inc. Supplement No. 1 Original Page 1

SUPPLEMENT NO. 1 TEMPORARY RATES

A temporary rate delivery charge of \$0.0229 per therm shall be billed by the Company to all customers taking service under all Rate Schedules of this tariff.

Issued: August 15, 2017

Effective: August 1, 2017

Issued By:

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Title:

Senior Vice President

	January	February	March	April	May J	lune	July	August	September	October	November	December	Total
Unit Sales (therms):													
R5:													
R-5 First Step	1,074,513			1,004,953	797,815	578,691	359,476	313,951	336,378		729,655	1,069,953	8,792,563
R-5 Excess	1,820,392			1,071,484	251,568	76,915	18,679	15,170		,	199,004	1,472,245	8,100,568
Total: R5	2,894,905	2,728,374	2,530,816	2,076,437	1,049,383	655,606	378,155	329,121	356,866	422,610	928,659	2,542,198	16,893,131
R6:													
R-6 First Step	9,027	8,970	8,917	9,030	9,110	9,378	9,271	9,104	9,285	8,940	9,149	9,413	109,594
R-6 Excess	18,324	17,397	15,958	14,839	9,026	6,989	5,535	5,150	5,625	4,343	8,288	22,970	134,444
Total: R6	27,351	26,367	24,875	23,869	18,136	16,367	14,806	14,255	14,909	13,283	17,437	32,383	244,038
R10:													
R-10 First Step	39,151	38,842	41,717	44,422	31,819	15,631	9,032	7,961	8,531	10,411	21,529	33,183	302,228
R-10 Excess	46,550	44,313	45,431	35,160	9,781	1,174	213	98	153	248	4,695	31,801	219,618
Total: R10	85,701	83,155	87,148	79,582	41,600	16,805	9,245	8,059	8,684	10,659	26,224	64,984	521,846
Total Residential	3,007,957	2,837,896	2,642,839	2,179,888	1,109,119	688,778	402,206	351,435	380,460	446,552	972,320	2,639,565	17,659,015
G40T40:	January	February		April			July	August	September	October	November	December	Total
G-40 First Step	347,983			326,229	237,004	159,159	76,179	77,104	83,643		216,784	330,584	2,652,155
G-40 Excess	1,499,973			960,658	314,530	121,728	69,028	50,291	64,850	,	312,730	1,226,954	7,431,596
Total: G40/T40	1,847,956	1,777,123	1,642,337	1,286,887	551,534	280,887	145,207	127,395	148,493	188,880	529,514	1,557,538	10,083,751
G41/T41:													
G-41 First Step	2,141,650	2,047,058	1,928,523	1,491,325	783,652	478,459	278,575	259,616	287,147	376,860	789,592	1,827,444	12,689,901
Total: G41/T41	2,141,650	2,047,058	1,928,533	1,491,325	783,652	478,459	278,575	259,616	287,147	376,860	789,592	1,827,444	12,689,911
G42/T42:													
G-42 First Step	896,712	824,226	909,275	544,990	362,313	188,087	207,732	216,244	262,011	364,661	635,918	976,219	6,388,388
Total: G42T/42	896,712	824,226	909,275	544,990	362,313	188,087	207,732	216,244	262,011	364,661	635,918	976,219	6,388,388
G50/T50:													
G-50 First Step	38,171	37,482	37,848	37,933	36,233	36,506	36,864	38,921	37,027	34,684	34,626	36,986	443,281
G-50 Excess Step	128,086	125,035	125,215	112,595	98,726	102,667	101,938	101,499	107,681	88,281	85,977	130,977	1,308,677
Total: G50/T50	166,257	162,517	163,063	150,528	134,959	139,173	138,802	140,420	144,708	122,965	120,603	167,963	1,751,958
G51/T51:													
G-51 -First Step	289,567	282,903	285,372	271,237	238,166	210,317	207,773	202,169	205,073	202,947	219,431	284,234	2,899,189
G-51 Excess	188,954	172,059	181,035	137,519	121,337	127,561	98,320	106,832	96,919	128,440	112,360	181,944	1,653,280
Total: G51/T51	478,521	454,962	466,407	408,756	359,503	337,878	306,093	309,001	301,992	331,387	331,791	466,178	4,552,469
G52:													
G-52 First Step	1,451,042	1,273,165	1,513,254	1,230,015	1,278,469	956,194	1,236,735	1,226,545	1,095,368	1,302,240	1,515,975	1,402,325	15,481,327
Total: G52/T52	1,451,042	1,273,165	1,513,254	1,230,015	1,278,469	956,194	1,236,735	1,226,545	1,095,368	1,302,240	1,515,975	1,402,325	15,481,327
Total C&I	6,982,138	6,539,051	6,622,869	5,112,501	3,470,430	2,380,678	2,313,144	2,279,221	2,239,719	2,686,993	3,923,393	6,397,667	50,947,804
TOTAL	9,990,095			7,292,389	4,579,549	3,069,456	2,715,350	2,630,656	2,620,179		4,895,713	9,037,232	68,606,819
Source: Data extracted from hilling system	1												

Source: Data extracted from billing system.

Program Cost-Effectiveness - 2017 PLAN

	Total Resource Benefit / Cost Ratio	enefits (\$000)	u	Itility Costs (\$000)	Cu	stomer Costs (\$000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
Residential Programs													
Home Energy Assistance	1.03	\$ 249.5	\$	241.1	\$	-	19.5	354	4.3	0.3	42	1,206.6	23,672.0
Energy Star Homes	1.71	\$ 357.9	\$	160.5	\$	49.1	42.5	970	10.0	0.7	42	1,276.5	31,681.5
Home Performance with Energy Star	1.23	\$ 253.0	\$	136.8	\$	69.4	10.8	184	1.9	0.2	30	1,228.8	25,504.0
Energy Star Products	1.15	\$ 499.5	\$	210.0	\$	224.0	18.5	289	5.2	-	397	2,987.7	50,524.9
Sub-Total Residential	1.25	\$ 1,359.8	\$	748.5	\$	342.4	91.4	1,797	21.4	1.2	511	6,699.6	131,382.4
Commercial & Industrial Programs													
Large Business Energy Solutions	2.24	\$ 3,291.8	\$	413.8	\$	1,058.4	-	-	-	-	43	19,472.3	385,820.2
Small Business Energy Solutions	1.58	\$ 781.8	\$	241.5	\$	252.7	-	-	-	-	72	4,403.6	89,832.3
Education		\$ -	\$	14.4	\$	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	2.06	\$ 4,073.6	\$	669.7	\$	1,311.0	-	-	-	-	115	23,875.9	475,652.5
Total	1.77	\$ 5,433.4	\$	1,418.2	\$	1,653.5	91.4	1,797	21.4	1.2	626	30,575.5	607,034.9

Program Cost-Effectiveness - 2017 ACTUAL

	Total Bassimas							A				November of	A	Lifations
	Total Resource Benefit / Cost	P	Benefits	U	tility Costs	Cıı	stomer Costs	Annual MWh	Lifetime	Winter kW	Summer kW	Number of Customers	Annual MMBTU	Lifetime MMBTU
	Ratio		(\$000)	Ŭ	(\$000)	-	(\$000)	Savings	MWh Savings	Savings	Savings	Served	Savings	Savings
Residential Programs										_				
Home Energy Assistance	0.95	\$	211.0	\$	221.1	\$	-	4.0	80	0.1	0.4	31	1,101.9	21,454.2
Energy Star Homes	1.40	\$	339.2	\$	170.9	\$	71.0	65.3	1,318	13.7	10.1	36	979.0	24,140.0
Home Performance with Energy Star	1.18	\$	201.2	\$	119.2	\$	50.9	3.3	65	0.5	0.3	37	1,007.1	21,156.4
Energy Star Products	1.08	\$	610.3	\$	254.6	\$	310.5	16.2	251	2.4	2.9	404	3,444.2	60,838.9
Sub-Total Residential	1.14	\$	1,361.7	\$	765.8	\$	432.4	88.8	1,715	16.7	13.6	508	6,532.2	127,589.5
Commercial & Industrial Programs														
Large Business Energy Solutions	3.84	\$	2,677.1	\$	376.6	\$	321.4	(80.7)	(1,211)	(13.3)	0.9	9	21,305.4	325,854.5
Small Business Energy Solutions	1.93	\$	692.4	\$	239.2	\$	119.3	0.8	15	0.2	-	204	4,439.8	79,748.3
Education		\$	-	\$	5.8	\$	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	3.17	\$	3,369.5	\$	621.6	\$	440.7	(79.9)	(1,196)	(13.1)	0.9	213	25,745.2	405,602.8
Total	2.09	\$	4,731.2	\$	1,387.4	\$	873.0	8.9	519	3.5	14.5	721	32,277.4	533,192.3

Present Value Benefits - 2017 PLAN

		al Benefits (\$000)	mmer eration	nter ration	Trans	mission	Distri	ibution	Vinter Peak	Winter Off Peak	ummer Peak	ımmer ff Peak	Ga	as Benefit	Gas DRIPE	E	lectic Benefits	ctric IPE	Non-Fue Benefit
Residential Programs																			
Home Energy Assistance	\$	249.5	\$ 0.5	\$ -	\$	0.1	\$	0.2	\$ 6.6	\$ 13.4	\$ 1.0	\$ 0.7	\$	201.4	\$ 25.	2 \$	22.4	\$ 0.4	\$
Energy Star Homes	\$	357.9	\$ 1.8	\$ -	\$	0.2	\$	0.8	\$ 18.8	\$ 38.8	\$ 1.1	\$ 1.4	\$	264.1	\$ 28.	4 \$	62.8	\$ 1.0	\$
Home Performance with Energy Star	\$	253.0	\$ 0.4	\$ -	\$	0.0	\$	0.2	\$ 3.1	\$ 6.3	\$ 1.1	\$ 0.6	\$	214.9	\$ 25.	9 \$	11.8	\$ 0.2	\$
Energy Star Products	\$	499.5	\$ -	\$ -	\$	-	\$	-	\$ 5.4	\$ 11.7	\$ -	\$ -	\$	421.0	\$ 61.	0 \$	17.1	\$ 0.4	\$
Sub-Total Residentia	l \$	1,359.8	\$ 2.6	\$ -	\$	0.3	\$	1.2	\$ 33.9	\$ 70.2	\$ 3.2	\$ 2.7	\$	1,101.3	\$ 140.	6 \$	114.1	\$ 2.0	\$
Commercial & Industrial Programs																			
Large Business Energy Solutions	\$	3,291.8	\$ -	\$ -	\$	-	\$	-	\$ -	\$ -	\$ -	\$ -	\$	2,866.8	\$ 423.	2 \$	-	\$ -	\$
Small Business Energy Solutions	\$	781.8	\$ -	\$ -	\$	-	\$	-	\$ -	\$ -	\$ -	\$ -	\$	675.5	\$ 97.	8 \$	-	\$ -	\$
Sub-Total Commercial & Industrial	\$	4,073.6	\$ -	\$ -	\$	-	\$	-	\$ -	\$ -	\$ -	\$ -	\$	3,542.3	\$ 521.	1 \$	-	\$ -	\$ 1
Tota	l \$	5,433.4	\$ 2.6	\$ -	\$	0.3	\$	1.2	\$ 33.9	\$ 70.2	\$ 3.2	\$ 2.7	\$	4,643.7	\$ 661.	6 \$	114.1	\$ 2.0	\$ 1

Present Value Benefits - 2017 ACTUAL

	To	otal Benefits (\$000)	mmer eration	Win Gener		Transm	nission	Distr	ibution	/inter Peak	/inter f Peak	Sumr Pea		Summ Off Pe		Gas Benefit	Gas DRIPE	Electio	: Benefits	Electric DRIPE		Non-Fuels Benefits
Residential Programs																						
Home Energy Assistance	\$	211.0	\$ 1.1	\$	-	\$	0.1	\$	0.5	\$ 1.4	\$ 1.9	\$	0.7	\$	8.0	\$ 180.4	\$ 22.7	\$	6.5	\$ 0.	1 \$	-
Energy Star Homes	\$	339.2	\$ 22.9	\$	-	\$	2.5	\$	10.1	\$ 22.8	\$ 43.0	\$	7.9	\$	6.1	\$ 200.6	\$ 21.8	\$	115.3	\$ 1.4	4 \$	-
Home Performance with Energy Star	\$	201.2	\$ 0.8	\$	-	\$	0.1	\$	0.4	\$ 0.8	\$ 1.3	\$	1.2	\$	0.7	\$ 168.5	\$ 20.2	\$	5.2	\$ 0.	1 \$	0.1
Energy Star Products	\$	610.3	\$ 6.6	\$	-	\$	0.7	\$	2.9	\$ 4.4	\$ 7.1	\$	1.4	\$	1.7	\$ 514.9	\$ 70.3	\$	24.7	\$ 0.	3 \$	-
Sub-Total Resident	tial \$	1,361.7	\$ 31.4	\$	-	\$	3.4	\$	13.8	\$ 29.4	\$ 53.3	\$	11.1	\$	9.3	\$ 1,064.4	\$ 135.0	\$	151.8	\$ 1.9	9 \$	0.1
Commercial & Industrial Programs																						
Large Business Energy Solutions	\$	2,677.1	\$ 2.0	\$	-	\$	0.2	\$	0.9	\$ (36.8)	\$ (38.8)	\$	1.6	\$	1.5	\$ 2,289.5	\$ 458.8	\$	(69.4)	\$ (1.8	8) \$	-
Small Business Energy Solutions	\$	692.4	\$ -	\$	-	\$	-	\$	-	\$ 0.3	\$ 0.6	\$	-	\$	-	\$ 577.6	\$ 97.7	\$	0.9	\$ 0.0	0 \$	16.2
Sub-Total Commercial & Industri	ial \$	3,369.5	\$ 2.0	\$	-	\$	0.2	\$	0.9	\$ (36.5)	\$ (38.2)	\$	1.6	\$	1.5	\$ 2,867.1	\$ 556.4	\$	(68.5)	\$ (1.	B) \$	16.2
То	tal \$	4,731.2	\$ 33.4	\$	-	\$	3.6	\$	14.7	\$ (7.1)	\$ 15.1	\$	12.7	\$ 1	.0.8	\$ 3,931.5	\$ 691.5	\$	83.3	\$ 0.:	1 \$	16.3

Performance Incentive Calculation 2017

	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial Incentive		
1. Benefit/Cost Ratio	2.02	3.07
2. Threshold Benefit / Cost Ratio ¹	1.00	1.00
3. Lifetime MMBtu Savings	475,653	405,603
4. Threshold Lifetime MMBtu Savings (65%) ²	309,174	
5. Implementation Expenses	\$669,697	\$621,571
6. Benefit / Cost Percentage of Implementation Expenses	2.75%	3.44%
7. Lifetime MMBtu Percentage of Implementation Expenses	2.75%	2.35%
8. Commercial & Industrial Performance Incentive	\$36,833	\$35,942
9. Maximum Commercial & Industrial Performance Incentive (6.875%)	\$46,042	
Residential Incentive		
10. Benefit / Cost Ratio	1.20	1.10
11. Threshold Benefit / Cost Ratio ¹	1.00	1.00
12. Lifetime MMBtu Savings	131,382	127,590
13. Threshold Lifetime MMBtu Savings (65%) ²	85,399	
14. Implementation Expenses	\$748,478	\$765,833
15. Benefit / Cost Percentage of Implementation Expenses	2.75%	2.52%
16. Lifetime MMBtu Percentage of Implementation Expenses	2.75%	2.67%
17. Residential Performance Incentive	\$41,166	\$39,738
18. Maximum Residential Performance Incentive (6.875%)	\$51,458	
19. TOTAL PLANNED / EARNED INCENTIVE	\$78,000	\$75,680

<u>Notes</u>

- ${\bf 1.} \ \ {\bf Actual \ Benefit\ /\ Cost\ Ratio\ for\ each\ sector\ must\ be\ greater\ than\ or\ equal\ to\ {\bf 1.0.}$
- 2. Actual Lifetime gas MMBtu savings for each sector must be greater than or equal to 65% of projected savings.

Planned Versus Actual Benefit / Cost Ratio by Sector 2017

		<u>Planned</u>		<u>Actual</u>
Com	mercial & Industrial			
1.	Benefits (Value) From Eligible Programs	\$ 4,073,586	\$	3,369,471
2.	Implementation Expenses	\$ 669,697	\$	621,571
3.	Customer Contribution	\$ 1,311,049	\$	440,651
4.	Performance Incentive	\$ 36,833	\$	35,942
5.	Total Costs	\$ 2,017,580	\$	1,098,164
6.	Benefit/Cost Ratio - Commercial & Industrial Sector	2.02		3.07
Resid	lential			
7.	Benefits (Value) From Eligible Programs	\$ 1,359,827	\$	1,361,682
8.	Implementation Expenses	\$ 748,478	¢	765,833
9.	Customer Contribution	\$ 342,416	\$	432,373
J. 10.		\$ 41,166	\$	39,738
		•		•
11.	Total Costs	\$ 1,132,060	\$	1,237,944
12.	Benefit/Cost Ratio - Residential Sector	1.20		1.10

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Lifetime Energy Savings by Sector and Program 2017

Lifetime MMBtu Savings

	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial		
Large Business Energy Solutions	385,820	325,854
Small Business Energy Solutions	89,832	79,748
Total Commercial & Industrial	475,653	405,603
Residential		
Home Energy Assistance	23,672	21,454
Energy Star Homes	31,682	24,140
Home Performance with Energy Star	25,504	21,156
Energy Star Products	50,525	60,839
Total Residential	131,382	127,590
Total Portfolio	607,035	533,192

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2017 Annual Report Reconciliation Northern Utilities - Unitil Gas January 1, 2017 - December 31, 2017

Unitil Gas Annual Report 2017 2017 Energy Efficiency Charge Fund Reconciliation

Total 2017

1.	Beginning Balance: 1/1/2017	(Over)/Under	\$ 25,280
Reve	enues		
2.	Energy Efficiency Charge Revenue		\$ 1,378,412
3.	Interest		\$ 7,320
4.	Total Funding	∑ Lines 2 - 3	\$ 1,385,731
Ехре	enses		
5.	Program Expenses		\$ 1,375,186
6.	2017 Program Expense True Up		\$ 12,990
7.	2017 Planned Performance Incentive		\$ 78,000
8.	PI Prior Year(s) True Up		\$ (6,446)
9.	Total Expenses ∑ L	ines 5 thru 8	\$ 1,459,730
10.	Ending Balance: 12/31/2017 L	ines 1 - 4 + 9	\$ 99,279
11.	Adjustment made in 2018 for 2017		\$ (772)
12.	Adjusted Ending Balance @ 12/31/2017 L	ines 10 + 11	\$ 98,507

Line 6: 2017 Program Expense True Up reflects adjustments to actual expenses

Line 7: 2017 Planned PI reflects what was budgeted and booked in 2017 model
Line 8: PI Prior Year(s) True-Up reflects adjustments for 2015 and 2016 PI as booked in 2017
Line 11: Adjustment reflects a GL Adjustment made in 2018 pertaining to 2017 after the 2017 books had closed